

ABSTRACT

A sliding bias circuit for dynamically controlling quiescent current flowing through an output transistor of a linear power amplifier operating in an output frequency band, the linear power amplifier comprising a circuit device for generating a bias signal producing a quiescent current flowing through the output transistor of the RF power amplifier, the sliding bias circuit comprising a detector circuit for detecting RF input to the amplifier and generating an output signal tracking the detected RF input, the output signal directly coupled to the circuit device for automatically modifying the bias signal and the quiescent current through the output transistor. In this manner, the quiescent current at the output stage is reduced and optimized for minimum dissipation and optimal linearity at all power output levels.